

**Virginia Energy: Geology and Mineral Resources Program Working Glossary**

Revised as of: 8/8/2022

Term	Definition	DefinitionSource
abandoned quarry	Remnants of open workings. Previously the site of industrial or commercial extraction of aggregate, slate, and other resources no longer in active use. Condition is circumstantial and varies by location.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
adit	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
anticline	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
antiform	A fold, generally convex upward, where stratigraphic order of folded layers is unknown or poorly constrained.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.

asymmetric fold	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
axial plane	A planar surface that connects the hinge lines of the strata in a fold.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
axial surface	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
borehole	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
breccia	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .

breccia pipe	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
compositional layering	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
concordant bedding	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
contact	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
contact metamorphism	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
core hole	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .

crenulation	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
crenulation cleavage	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
crenulation lineation	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
cross section	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
dike	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .

fault	A discrete surface or zone of discrete surfaces separating two rock masses across which one mass has slid past the other.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
float	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
fold	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
fold axis	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
foliation	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .

furnace	A structure in which, with heat so produced, the operation of roasting, reduction, fusion, steam-generation, dessication, etc., are carried on.	Thrush, P.W., ed., 1968, A dictionary of mining, mineral, and related terms: Washington, D.C., U.S. Department of the Interior, Bureau of Mines, 1269 p.   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
gas well	A well that is capable of producing natural gas or that produces chiefly natural gas.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
gneissic banding	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
horizontal bedding	A planar or nearly planar bedding surface that visibly separates each successive layer of stratified rock from the preceding or following layer. Is observed in a flat lying, horizontal plane and has no inclination or dip.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.

horizontal foliation	A horizontal parallel to ground locally planar fabric in a rock defined by a fissility, a preferred orientation of crystal planes in mineral grains, a preferred orientation of inequant grain shapes, or from compositional banding.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
inclined bedding	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
inclined cleavage	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
inclined dike or vein	An inclined tabular igneous intrusion that cuts across the bedding or foliation of the country rock or an inclined fracture that contains mineralized material.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.

inclined flow banding	The structure of an igneous rock that is inclined relative to the ground surface, characterized by alternating layers of color, mineralogic composition, and/or texture, formed as a result of the flow of magma or lava.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
inclined fold hinge	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
inclined fold hinge of small, minor anticline	A plunging line connecting the points of maximum curvature of the bedding planes of a small or minor anticline.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
inclined fold hinge of small, minor syncline	A plunging line connecting the points of maximum curvature of the bedding planes of a small or minor syncline.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.



inclined foliation	An inclined locally planar fabric in a rock defined by a fissility, a preferred orientation of crystal planes in mineral grains, a preferred orientation of inequant grain shapes, or from compositional banding.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS%20Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS Glossary.pdf</a> , accessed 18 July 2022.
inclined foliation - gneissic	An inclined locally planar fabric in a rock defined by a fissility, a preferred orientation of crystal planes in mineral grains, a preferred orientation of inequant grain shapes, or from compositional banding. More specifically pertaining to the texture or structure typical of gneisses, with foliation that is more widely spaced, less marked, and often more discontinuous than that of a schistose texture or structure	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS%20Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS Glossary.pdf</a> , accessed 18 July 2022.
inclined foliation - mesoproterozoic	An inclined locally planar fabric in a rock defined by a fissility, a preferred orientation of crystal planes in mineral grains, a preferred orientation of inequant grain shapes, or from compositional banding. Mesoproterozoic in age.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS%20Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS Glossary.pdf</a> , accessed 18 July 2022.

inclined foliation - metamorphic or tectonic	An inclined locally planar metamorphic or tectonic fabric in a rock defined by a fissility, a preferred orientation of crystal planes in mineral grains, a preferred orientation of inequant grain shapes, or from compositional banding.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
inclined foliation - mylonitic	An inclined locally planar mylonitic fabric in a rock defined by a fissility, a preferred orientation of crystal planes in mineral grains, a preferred orientation of inequant grain shapes, or from compositional banding.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
inclined foliation - Paleozoic	An inclined locally planar fabric in a rock defined by a fissility, a preferred orientation of crystal planes in mineral grains, a preferred orientation of inequant grain shapes, or from compositional banding. Paleozoic in age.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.

inclined joint	An inclined planar fracture, crack or parting in a rock, without shear displacement.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
inclined lineation	A plunging locally linear structure or fabric in a rock.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
intersection lineation	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
isograd	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .

map boundary	The cartographic boundaries of 1:24,000-scale topographic maps used as scratch contacts between geologic units where congruent mapping does not exist.	Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
map neatline	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
mine	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
mineral lineation	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
minor fault	A minor discrete surface or zone of discrete surfaces separating two rock masses across which one mass has slid past the other.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.

normal fault	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
oblique-slip fault, left-lateral	A fault that strikes oblique to, rather than parallel or perpendicular to, the strike of the constituent rocks or dominant structure. Displacement along the fault is such that in plan view, the side opposite the observer appears displaced to the left.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
occurrence	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
outcrop	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .

overturned anticline	A fold, generally convex upward, whose core contains the stratigraphically older rocks that has tilted beyond perpendicular. Sequence of the strata thus appears reversed.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
overturned bedding	A planar or nearly planar bedding surface that has tilted beyond the perpendicular.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
overturned syncline	A fold, generally concave upward, whose core contains the stratigraphically younger rocks that has tilted beyond perpendicular. Sequence of strata thus appears reversed.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.

overturned thrust fault	A thrust fault that has tilted beyond the perpendicular. The sequence of the strata thus appears reversed.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
pit	An excavated area where earth material (sand, gravel, etc.) is taken to be used for fill at another location.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
plunge	The angle between a linear structure such as a fold hinge, slip lineation, mineral lineation, and the horizontal as measured in the vertical plane containing the line.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
processing plant	A facility with the purpose of processing or refining natural resources of economic value.	Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.

prospect	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
quarry	Open workings, usually for the industrial or commercial extraction of aggregate, slate, and other resources.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
reverse fault	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
sample	A hand specimen; rocks, sediment, fossils, or other material of a size that is convenient for megascopic study and for preserving in a study collection.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.



shaft	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
shear zone	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
slickenlines	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
spaced cleavage	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
spring	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
state boundary	The cartographic boundary of the Commonwealth of Virginia.	Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.

station	A point where a qualitative observation is taken.	Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
strike-slip fault, left-lateral	A fault on which the movement is parallel to the fault's strike. Displacement along the fault is such that the side opposite the observer has been displaced to the left.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
strike-slip fault, right-lateral	A fault on which the movement is parallel to the fault's strike. Displacement along the fault is such that the side opposite the observer has been displaced to the right.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
syncline	A fold, generally concave upward, whose core contains the stratigraphically younger rocks.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.

synform	A fold, generally concave upward, where stratigraphic order of folded layers is unknown or poorly constrained.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
tension fracture	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
thrust fault	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
vein	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .

vertical cleavage	A vertical surface along which a rock tends to split because of secondary, aligned fractures or other closely spaced, planar structures or textures, produced by deformation or metamorphism.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
vertical compositional layering	Alternating vertical layers of different minerals in an igneous or metamorphic rock.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
vertical dike or vein	A vertical tabular igneous intrusion that cuts across the bedding or foliation of the country rock or a vertical fracture that contains mineralized material.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.

vertical flow banding	The structure of an igneous rock characterized by alternating vertical layers of color, mineralogic composition, and/or texture, formed as a result of the flow of magma or lava.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
vertical foliation	The vertical planar arrangement of textural or structural features in any type of rock, especially the locally planar fabric in a rock defined by a fissility, a preferred orientation of crystal planes in mineral grains, a preferred orientation of inequant grain shapes, or from compositinal banding.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
vertical foliation - igneous	A vertical locally planar fabric in an igneous rock defined by planar parallelism of flaky or tabular minerals and mineral aggregates, slabby xenoliths, or flattened vesicles as well as compositional layering	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.

vertical gneissic banding	A type of vertical foliation in metamorphic rock that is defined by compositional banding. Typically, gneissic banding consists of alternating dark (mafic) and light (felsic or silicic) bands of rock. Gneissic banding may reflect original compositional layering in the protolith, or lit-par-lit intrusion, or metamorphic differentiation by diffusion, or transposition.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
vertical joint	A vertical planar fracture, crack or parting in a rock, without shear displacement.	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .   Virginia Department of Energy, Geology and Mineral Resources Program GeMS Glossary, 2022. Available Online: <a href="https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf">https://energy.virginia.gov/geology/documents/GEMS_Glossary.pdf</a> , accessed 18 July 2022.
vertical schistosity	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .
water well	See American Geosciences Institute definition, available online: <a href="https://www.americangeosciences.org/pubs/glossary">https://www.americangeosciences.org/pubs/glossary</a>	Neuendorf, K.K.E., Mehl, J.P., and Jackson, J.A. (eds), Glossary of Geology, American Geosciences Institute, Available online: <a href="https://glossary.americangeosciences.org/">https://glossary.americangeosciences.org/</a> .